

LiitoKala®



CHARGER Lii-S8 USER MANUAL

1. Warning: rechargeable battery (ni-mh-9v);

- 1.1 The charger can only charge cylindrical Lithium-Ion battery (Li-Ion-3.70V / 3.80V), lithium iron phosphate battery (LiFePO₄-3.20V), NIMH / NICD (Ni-MH / NICD-1.20V) battery, and prismatic 9V NIMH rechargeable battery (Ni-MH-9V);
- 1.2 Before use, please refer to the manual carefully and pay attention to the recommended charging current of the battery, and do not exceed the recommended charging current;
- 1.3 Choose 12.0V DC adapter, and the power supply current should not be less than 4.0A;
- 1.4 The charger may be hot when charging, please put it out of the reach of children;
- 1.5 When you stop using, please unplug the power supply and battery;
- 1.6 It can only be used indoor at normal temperature;
- 1.7 The test data of this product is for reference only. Please refer to the professional instrument for the actual situation.

2. Charger specifications and functions:

- 2.1 Adopt DC12.0V 4.0A (minimum) input, intelligent charging and microcomputer management system for each channel;
- 2.2 The biggest highlight of this charger is that it can make quick charge multi-channels at 2A current at the same time and can charge 9V NIMH battery ;
- 2.3 There are five levels of charging current: 0.30A/0.50A/0.70A/1.00A/2.00A;
- 2.4 Charging current:
 - 2.4.1 As soon as the lithium-ion battery (3.70V / 3.80V) and LiFePO₄ battery (3.20V) are inserted into the charger, the system automatically configures the current according to the internal resistance of the battery. To change the charging current, long press the current button, and when the current value flashes, short press the current button to select the charging current 0.30A/0.50A/0.70A/1.00A/2.00A(Note: the maximum charging current can be 2.0A only for slot# 1 / 3 / 6 / 8 , and 1.0A for slot# 2 / 4 / 5 / 7; the total charging current between slots 1 and 2, 3 and 4, 5 and 6, and 7 and 8 will not exceed 2A in total. That is to say when one of the two slot-group is charged with 2A current and then the other slot in the same group will fall back to 1A current charging;
 - 2.4.2 the charging current of NiMH / NiCd battery (1.20V) will be fixed at 0.50A and the current can not be selected;
 - 2.4.3 NiMH (9.0V) rechargeable battery can be charged in a specific place, and two batteries can be charged at the same time, and the charging current of each battery is about 85mA;
- 2.5 During charging, LCD can display battery symbol / channel(CH) and battery type of the channel / charging current(A) / battery voltage(V) / charging time(h) / charging capacity(mAh) / energy percentage% / battery internal resistance(mΩ); standby display "null", When the channel is short circuited or the battery is reversely connected, "Err" will be displayed. When the battery is full, the data on the LCD will be saved and the display will be 100%, and the battery symbol will not move. There will be red and green indicator lights for each slot. The red light will be on when charging, and the green light will be on when the channel standby or fully charged(stop charge); when the battery or channel is abnormal (short circuit / reverse connection, etc., the red light will be flashing with warning;

2.6 The system can automatically identify lithium-Ion 3.70V and NIMH / NiCd (1.20V) batteries. Press the mode key to manually select LiFePO4 battery(3.20V) or lithium-Ion 3.80V batteries (IMR); The data will not be displayed on the LCD screen for NIMH (9.0V) battery;

2.7 With 0 voltage activation function and battery of 1.65-2.20V can not be charged (but there will be trickle current activation charging);

2.8 It has multiple safety protection functions, such as overcharge, over discharge, short circuit, reverse connection, etc., and it can intelligently and automatically identify the bad battery;

2.9 Charging mode: constant current and voltage.

3. Buttons and display:

3.1 buttons:

3.1.1 "mode" (charging mode): this button is for the battery type selection; when the battery is inserted, within 9 seconds, click "mode" button to select the type of rechargeable battery (Li-Ion-3.70V, Li-Ion-3.80V,

LiFePP4-3.20V); but when NiMH / NiCd(1.20V) battery is inserted, the other types cannot be selected ;

During the charging process, long press the mode button to reselect the battery type, but the previous charging data will not be saved;

3.1.2 "next"(next channel): this button is the inquiry button from 1 to 8 slots. Each time you click this button, the channel will display charging data from the low-no channel to the high-no channel (CH1,CH2... CH8);

long press this button to make the LCD screen in the stable light on state, and press it again to recover to normal light on state ;

3.1.3 "PREV"(previous channel): this button is 8 to 1 slot query key. Each time you click this key, the channel will display the charging data from the high-no channel to the low-no channel (CH8,CH7...CH1); long press this button to make the display screen in the stable light on state, and press it again to recover to the normal Light on state;

3.1.4 "CURRENT" : this button is for charging current selection. If the battery is inserted with the charger power supply connected in 9 seconds, the system will automatically configure the current according to the internal resistance of the battery. To change the charging current of a certain channel, first click the "NEXT" or "PREV"button to display the channel, and then long press the "CURRENT" button. When the current value flashes, press the current button briefly to change the charging current of the channel. If you want the charging current of all the installed batteries become the same, when the battery type in the display is still flashing, press the current button for a long time and then press the current button for a short time to adjust the current. At this time, the current values of all the channels are the same;

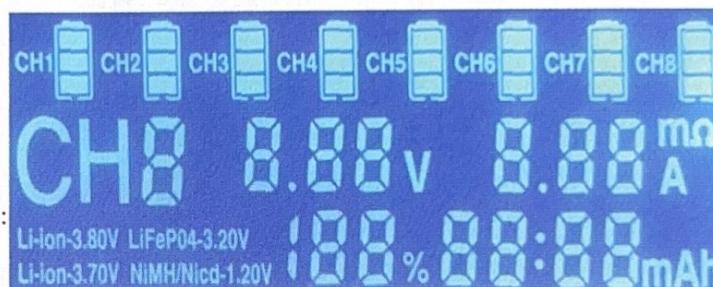
3.2 Display LCD and indicator light:

3.2.1 after the charger is connected to the power supply, the LCD display screen will display for about 3 seconds, and then only "null" will be displayed. At the same time, the indicator light corresponding to the channel will be red, green, and then off. When "null" is displayed, the green light will always be on; the indicator light of 9V charging channel will always be on for charging standby;

3.2.2 when a battery is detected, LCD will display the battery symbol / channel no(CH) and the battery type (Li-Ion-3.70V/Li-Ion-3.80V/LiFePO4-3.20V/NiMH / NiCd-1.20V) , charging current (A) , battery voltage(V) ,

charging time(h) , capacity(mAh) , energy percentage% , battery internal resistance(mΩ); after selecting the charging battery type (for example, 3.20V/3.80V or default) and charging current, the battery type will flash for 7 times, and the battery will be charged after about 9 seconds. At this time, the cycle ladder of the battery symbol rises, indicating that the charging is in progress, and the corresponding channel indicator Red light is on; During the charging process, you can click the "NEXT" or "PREV" button to query the battery parameters of each slot; when the LCD is dark, click any key to light up the screen; long press the "NEXT" or "PREV" button can make the LCD in the stable light-on state; when the charging is completed, the battery symbol is full, the display is 100%, the charging parameters are saved, and the indicator light is always on green.

3.2.3 when the battery or channel is detected to be abnormal(short circuit / reverse connection, etc.), the screen will display the corresponding battery channel(CH) of "Err", then the battery symbols for error channels should be flashing in full space, at the same time, the corresponding indicator light red flashing with warning(Short circuit / reverse connection, etc.); the screen display will not change for 9V NiMH battery when error happens, just the two indicator lights will be on constant red.



*LCD display figure for reference :

4. Electrical technical parameters:

4.1 Power supply input: DC 12.0V 4.0A(min.)

4.2 Output voltage: DC 4.20V for Li-ion

DC 4.35V for IMR

DC 3.65V for LiFePO4

DC 1.48V for NiMH/NiCd

DC 9.0V for NiMH

4.3 Output current:

Li-ion/IMR/LiFePO4: 2.00A*4(only slot#1/3/6/8), 0.30A/0.50A/0.70A/1.00A*8

NiMH/NiCd: 0.50A*8

NiMH-9V: 85mA*2

4.4 Constant current(CC)/constant voltage(CV) charge, cutoff current 100mA;

4.5 Standby current without load: <50mA;

5. Compatible battery types and size

Li-Ion / IMR(Li-Ion 3.8V)/LiFePO4: 26650, 21700, 20700, 18650, 18490, 18350, 17670, 17500, 16340(RCR123), 14500, 10440

NiMH/Cd: AA, AAA, SC/C

6. Charger dimension:

195.0mm× 142.5mm×35.0mm(L*W*H)

Weight:364g (Not including data cable)